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T. W. BLASINGAME COMPANY, INC.

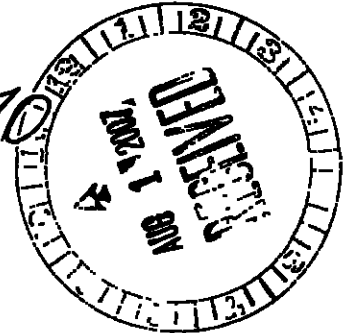
208-345-5457 • POST OFFICE BOX 1532 • BOISE, IDAHO 83701

July 25, 2007

STB-070725-1

SURFACE TRANSPORTATION BOARD
395 E Street S. W.
Washington, DC. 20423-0001

Ex Parte 670



Reference: Meeting on July 18, 2007
to discuss issues related to rail transportation
of resources critical to nation's energy supply

Subject: "Strategic Vulnerability of Coal Transportation"
N&W Fuel Cost Comparison

Ladies and Gentlemen:

We are an independent custom design and product development company located in Boise, Idaho. For the past 17 years we have been engaged in a project to design and develop locomotives and heavy duty trucks capable of operating cleanly, coolly and quietly on fuels other than oil.

I have submitted information on our proposed Alternate Fueled Motive Power and also have been able to make some comments during your July 18, 2007 meeting in Kansas City.

One of the questions asked following my comments was why the major railroads were not interested in going back to the use of coal as a railroad fuel. My first answer was that they would prefer to haul coal to a customer (rather than have a non-revenue fuel haul). This logistics problem could be resolved by having third party fueling station operators pay for the coal hauled to their facilities, and add their markup prior to billing the railroad for fuel dispensed into the locomotives. The largest bulk materials handling company in the US has said that they would build, own and operate such fueling stations at no capital cost to the railroads if long term fuel supply contracts could be arranged.

My second answer was that I didn't think the railroads understood the power generating business (in which every power plant operator is cognizant that coal is the lowest cost fuel for electric power generation). I stated that the Norfolk & Western Railway had used a side-by-side cost comparison based on BTU value to justify its continued use of reciprocating steam motive power long after other railroads had abandoned steam in favor of diesel-electric locomotives. The attached diagram from N&W: Giant of Steam shows that at that time N&W's modern steam motive power could achieve 18% more work at the rail. Of course, the costs are different today, but the use of coal or other solid fuels is even more viable in today's world considering the vulnerability of the petroleum industry.

Our program is to provide our Alternate Fueled Motive Power to the railroads under a full service lease program in which we provide all maintenance services. In view of the possible ramifications of the destruction of this country's petroleum refining facilities, we suggest that it would be to the nation's best interests if coal-fueled locomotives hauled the nation's coal unit trains. Replacing 10% of the coal unit trains diesel-electric locomotives with coal fueled locomotives each year would seem to be an orderly and reasonable time frame for this conversion. The displaced diesel-electric locomotives could be easily reassigned to other types of hauls without any major problem for the railroads.

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Our Alternate Fueled Motive Power is designed to be fueled at the mine mouth by the same equipment presently used to load the coal unit train cars. At other locations, fueling can be accomplished by the use of construction type front-end loaders or conveyors, etc. A secondary solid fuel, densified and cubed municipal solid wastes, is also available from local subcontractors in any area where there are existing landfills. The use of this type of fuel would qualify for Renewable Energy status. Both the coal and the above suggested alternate solid fuels would be available at far less cost than petroleum-based diesel fuel, and certainly less than diesel fuel manufactured from coal.

As I mentioned in my remarks, coal can be made into diesel fuel; you take \$14/ton coal, add \$80/ton in processing, and you have synthetic diesel fuel. What we are proposing is to take the \$14/ton coal and run it through the locomotives with no further processing. For over 150 years, coal fired locomotives hauled over 85% of this nation's freight. The use of domestically produced solid fuels for locomotives would eliminate the strategic vulnerability of coal transportation and lower coal transportation costs significantly at the same time. From an environmental standpoint, the solid fuels are much less damaging to the earth and its inhabitants. From the railroad standpoint, the use of the solid fuels would provide additional profits with no downside.

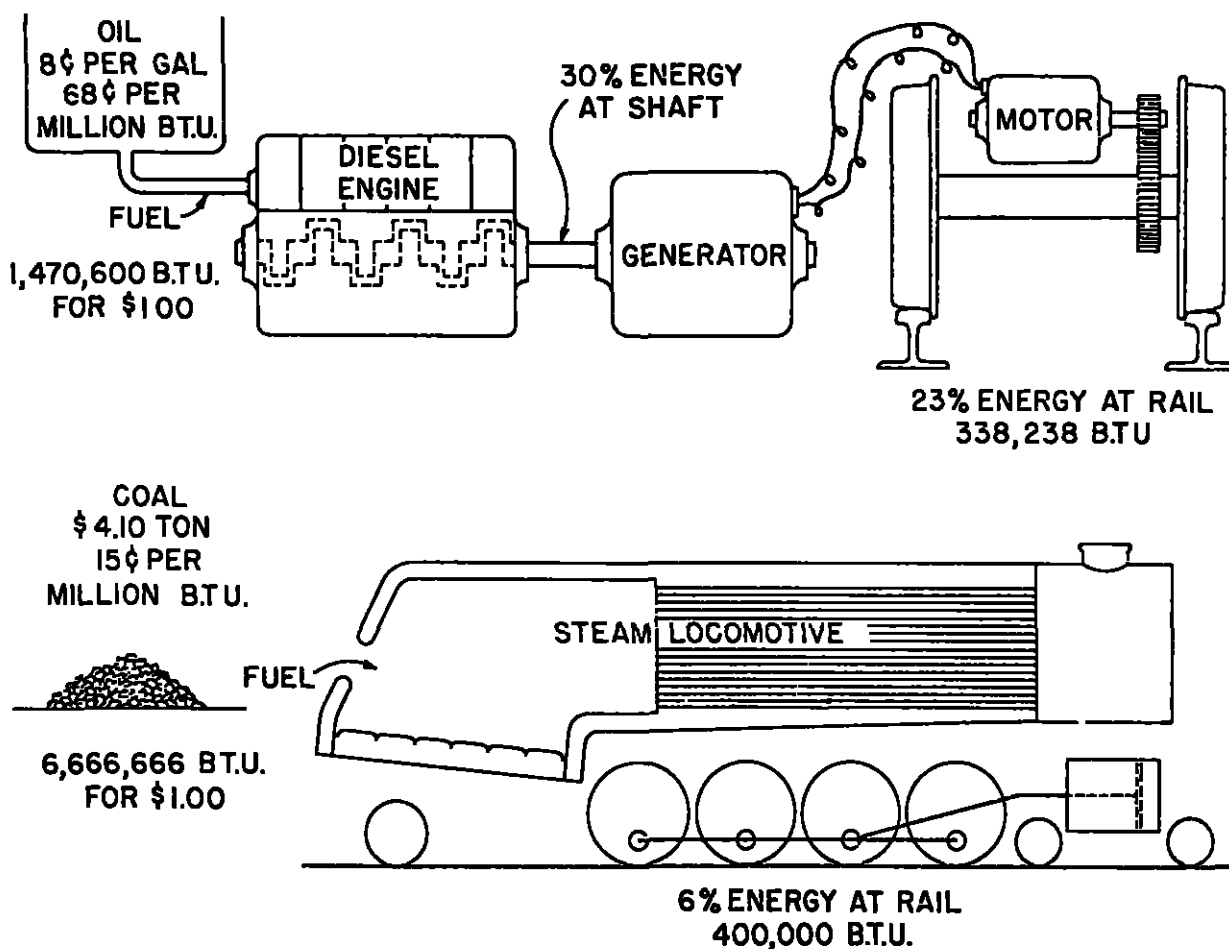
The Wall Street Journal for today has a front page article telling of the numerous cancellations in proposed coal fired power plants brought on by an increased concern for the CO2 emissions from these plants. Our research has uncovered technology to make a liquid fuel from CO2. When we get in the prototype construction stage, we will install a system to utilize this technology and use the liquid fuel to augment the solid fuels. This will pay for the additional system required to eliminate the CO2 from the exhausts. We will not be planning to make the liquid fuel for use except on the locomotive (or mobile electric generating plant). I thought this would be of interest to you.

Sincerely,

T. W. BLASINGAME COMPANY, INC.

**Thomas W. Blasingame
President**

**TWB/mar
enclosure: Page 62, N&W: Giant of Steam, 1st Edition, Jeffries**



The economics of continuing with modern, coal-fired locomotives justified the construction of N&W home-built steam power in the late '40s. This schematic shows that for equal dollar amounts of fuel compared, steamers could get 18% more work at the rail. Furthermore, diesels initially cost more for a given capacity, and their availability for service was not better than N&W's modern steam. *Courtesy N&W*

The heavy grades over three mountain ranges and the heavy coal traffic dictated motive power requirements on the N&W. For freight service, the locomotives had to pull with an enormous force on the frequent, adverse grades, while on the flatter portions of the system they moved these same trains at near passenger train speeds. This requirement necessitated locomotives of both high tractive effort and high horsepower ratings. For mountain work, the World War I era 2-8-8-2 compound Mallet was improved upon, updated and refined to the point that it could develop 152,206 pounds starting tractive effort and produce more than 5,600 drawbar horsepower in the twenty-five miles per hour range.

The idea of using steam twice in the Mallet compound was not discarded by the N&W as it was by other railroads. The N&W knew that the Mallet was slow, but nonetheless very powerful. For mountainous work where heavy train speeds were low, the Mallet compound's advantages of brute power with steam economy was capitalized upon. Thus the economy of using steam twice paid off. As for the versatile 2-6-6-4, a totally N&W designed locomotive, it could handle the heaviest coal trains on the level stretches of the system, step out with a time freight in mountain regions, and wheel a heavy passenger train at seventy miles per hour. The 4-8-4 passenger locomotive could cruise routinely at ninety miles per